



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 27th FIGHTER WING (ACC)
CANNON AIR FORCE BASE, NEW MEXICO

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Ron K X*

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Michael J. Koerner*

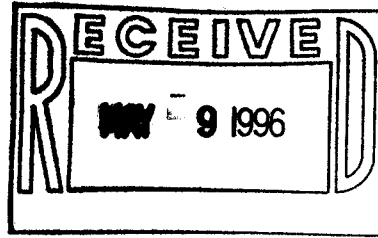
07 MAY 1996

Steve P.

*Steve
Beth Conner
Responsible
Dime Publications*

Gale W. Larson, Colonel, USAF

Commander
100 S DL Ingram Blvd Suite 100
Cannon AFB NM 88103-5214



Mr. Benito Garcia
Bureau Chief
Hazardous Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo Street
Santa Fe NM 87502

Dear Mr. Garcia

The Cannon AFB responses to the New Mexico Environment Department (NMED) Notice of Deficiency (NOD) for the RCRA Interim Corrective Action Appendix II and Appendix III Oil-Water Separator Construction Work Plan are attached for your review and approval. These responses answer the NMED NOD received at Cannon AFB on 25 Mar 96.

If you have any questions concerning these responses, please contact Mr. John S. Pike or Mr. John Constantine, of my environmental flight, at (505) 784-4348.

Sincerely

Gale W. Larson
GALE W. LARSON, Colonel, USAF
Commander

Attachment:
Cannon AFB Responses to NOD

cc:
EPA Region VI (Mr. B. Sturdivant)
HQ ACC/CEVC (Mr. R. Shannon)

**RESPONSE TO NMED COMMENTS
CONSTRUCTION WORK PLAN
APPENDIX II & III SWMUs (OIL/WATER SEPARATORS)
CANNON AIR FORCE BASE, NEW MEXICO
EPA I.D. NO. NM7572124454**

GENERAL COMMENTS

Comment No. 1. The usages of Removal Action Levels and Cleanup Levels need to be differentiated. Removal action levels are used for project sites which pose immediate threats to human health and the environment. Cleanup levels from confirmation tests should be met, not Removal Action Levels.

Response: The terms "removal action level" and "cleanup levels" shall be deleted from this workplan. These two terms will be replaced by the term "preliminary remediation goals (PRGs)" and the document will be revised to reflect these changes. PRGs will be used to define the extent to which soils will be removed from individual SWMU units for treatment or disposal. PRGs shall be specified for TPH at 100 ppm, and BTEX at 50 ppm in soils. Both field screening and analytical methods shall be used to determine if PRGs have been met. Initially, field screening methods shall be used by the construction contractor, however, final determination of horizontal and vertical extent of contamination will be provided by analytical methods. OK

Comment No. 2. The analyte parameters, TRPH and BTEX can be used for screening purposes, but not for cleanup purposes, because the toxicities of individual compounds in these parameters are varied. The percent of benzene in TRPH and BTEX should be verified.

The NMED's cleanup levels for BTEX, 50 ppm and benzene, 10 ppm appear too high to protect human health. Although EPA does not have cleanup standards for TRPH and BTEX, the risk-based cleanup criteria (RBC) is 3.2 ppm for benzene (see *Region 9 Preliminary Remediation Goals*, February 1, 1995). This is the level calculated using the industrial land use scenario, and assuming that no contaminated soil has impacted the ground water.

Response: All references to the analyte parameters TPH and BTEX being used to determine cleanup of soils under this interim action shall be deleted from the work plan. The constituents of TPH and BTEX will be analyzed for in confirmatory samples using EPA methods 8260 and 8270. OK

Comment No. 3. EPA recommends that the individual VOCs and SVOCs be analyzed and the cleanup levels for detected compounds should be established based on risk-based concentrations (RBCs), background values, or sample quantitation limits, but not the TCLP levels indicated in Table 1 of the Work Plan.

Response: Confirmatory samples shall be submitted for laboratory analysis to verify field

screening methods and results. Confirmatory samples collected from the bottom of the SWMU unit excavation shall be analyzed for VOCs and SVOCs using EPA methods, 8260 and 8270, respectively.

Comment No. 4. All measured chromium values should be assumed to be in a hexavalent state for the Risk Assessment. An alternative approach would be to analyze samples for valence specific chromium.

Response: Analysis of total chromium has been used in the previous Phase 1, Appendices II & III RFIs, and the likelihood of all existing chrome being hexavalent is statistically unlikely. Cannon AFB recommends, for consistency, that chrome be evaluated in the manner previously established and approved by regulatory officials in the applicable RFIs. — A PROBLEM HERE. HAND OUT DATA. ABOUT 500.

Comment No. 5. Cell #1 shall be used to landfarm soils associated with UST removal operations, and Cell #2 shall be used to landfarm soils associated with OWS, sand traps, leach well, drain, and associated piping removal operations. A Storage Cell (#3?) for storage prior to remediation shall be constructed adjacent to landfarm Cells 1 and 2. It is not clear if soils intended for Cells 1 and 2 may be mixed in this storage cell. Metals concentrations from OWS type units may be higher than those of UST type units. Dilution of metals concentrations by mixing soils from two sources in Storage Cell 3 is a regulatory concern.

Response: Cell 1 of the landfarm is to be used to remediate soils excavated adjacent to the USTs. Cell 2 of the landfarm is to be used to remediate soils excavated adjacent to oil/water separators (OWSs) and their associated piping, traps and drains. The soils from the USTs and the OWS shall be segregated in the storage cell prior to placement in the appropriate landfarm cell.

COMMENT NO. 6 In summary, the following are soil cleanup levels for an industrial land use scenario recommended by EPA for Cannon AFB:

Analyte	Cleanup Level, ppm	Rationale
TRPH	100	NMED Level
BTEX	10	EPA recommended
Benzene	3.2	Region 9 RBC
VOCs	depends on analytes	RBC
SVOCs	depends on analytes	RBC or Background
Arsenic	=6	site background
Barium	1,000	Region 9 RBC ceiling
Cadmium	100	Table 1

Chromium IV	230	Region 9 RBC
Lead	500	Table 1
Mercury	20	Table 1
Selenium	100	Table 1
Silver	500	Table 1
Antimony	6.75	Table 1
Beryllium	0.73	Table 1
Cobalt	4.5	Table 1
Copper	5.4	Table 1
Manganese	164	Table 1
Nickel	9	Table 1
Thallium	0.5	Table 1
Zinc	21.9	Table 1

Response: The response to Comment 1 deletes the use of the term "cleanup level" in the workplan, therefore, Table 1 also shall be deleted. A new table shall be provided which will list the analytical methods that are appropriate for confirmatory sampling.

with TCLP ANALYSIS FOR OPERATIONS

Soils that fail to meet the PRGs for TPH and BTEX, and also meet the RCRA hazardous waste criteria with respect to metals, shall be disposed of in a RCRA hazardous waste landfill. Soils that fail to meet the PRGs for TPH and BTEX, but are not RCRA hazardous wastes with respect to metals, will be landfarmed. Once landfarmed soils have been remediated to at or below the PRGs for TPH at 100 ppm and BTEX at 50 ppm, those soils will be placed in the construction debris landfill at Cannon AFB, or may be used as cover material at Landfill 25/SWMU 97, if the soils can be placed in distinct areas or cells that can be surveyed and documented for future reference.

SPECIFIC COMMENTS

Comment 1. Table 1, page 5: Removal Action Levels and Cleanup Levels for VOCs, SVOCs, and 8 metals were determined by using EPA Methods 1311. TCLP levels are used to determine hazardous wastes. EPA does not set cleanup levels for this suite of constituents. EPA Method 1311 is not necessary for sample analysis.

Response: EPA Method 1311 is used for characterization of soils prior to disposal, rather than for cleanup at the individual SWMU sites. The TCLP analysis is required by facilities

which receive this material for disposal and provides more stringent cleanup levels.

Comment 2. Drawing No. 1 (SWMU Layout) does not show SWMU No. 92.

Response: SWMU No. 92 is located on the south side of the base and is not near any of the other SWMUs. SWMU No. 92 is shown on the drawing in the upper right-hand quadrant.

Comment 3. Section 2.0 (Existing Site Conditions) text refers to SWMU Nos. 32 and 33, however, Drawing No. 1 shows SWMU Nos. 32A and 33B.

Response: The numbering will be changed to clarify this comment.

Comment 4. Section 3.6.1, page 18, lines 27 and 28: field screening of the concrete or asphalt pavement waste materials before disposal should be added to this plan.

Response: Concrete and asphalt pavement waste materials shall be visually inspected and photoionization or flame ionization detectors, as appropriate, shall be used to screen for contamination prior to disposal off site. Any contamination shall be physically removed prior to disposal.

Comment 5. Documentation Requirements. The procedures describing how field measurements are reviewed and validated should be specified. This should include formulas used to calculate results, and procedures used to verify that field measurements are correct.

Response: Data validation methods shall be included in the final document.

Comment 6. Section 4.0, Sampling and Analysis Plan. The following information should be included in the plan:

1. Data quality objectives.
2. Detection limits.
3. Name of analytical laboratory.
4. Sample preservation and holding times.
5. Criteria for data acceptance and rejection.

Response: Data quality objectives, detection limits, the name of the analytical laboratory, sample preservation and holding times and data validation methods shall be added to the work plan.